

VIII.

Observations Sur la Nature, et sur le Traitement du Rachitisme. Per Antoine Portal, Professeur de Medicine, &c. 8vo. Paris, 1797.

MPORTAL, who has had very extensive experience in cases of rickets, exhibits in this work a view of the result of his practice in that disease.

Every case of mollities ossium, he considers to be Rachitis, and consequently, according to him, the disease occurs at every different period of life. He imagines that it is generally symptomatic, arising from some previous complaint, and he doubts entire'y the existence of idiopathic rickets. He divides the symptomatic disease into six species, experience, he says, having convinced him, that

that it is occasioned by the following circumstances, namely, the syphilic virus, scrophula, scurvy, eruptive diseases, obstructions in the abdominal viscera, and rheumatism or gout.

1. Rickets in children arising from the syphilitic virus, are accompanied with the continual discharge of a greenish matter from the eye-lids, with chancres or ulcerations about the mouth, and sometimes blotches about the genitals, and excoriations about the anus. The skin at the same time is of a dull yellow colour, and is dry, and rough to the touch. Emaciation very quickly takes place. Hætic fever, accompanied with frequent cough, supervenes, and constant vomiting, or colliquative diarrhœa, generally precede death. In some of these cases, it has been found, not only that the spongy bones became enlarged, and the long ones curved, but also that some of the bones were harder, and more brittle than natural, and rather lost than gained in size. In the same disease in adults, the spongy bones, and particularly those of the nose

and mouth, are most liable to become affected.

For the cure of this species of the disease, mercurial preparations are, according to M. Portal's opinion, alone to be trusted. Where the children are still upon the breast, it was always sufficient to give these remedies exclusively to the nurse. A long continued gentle course, he considers in many cases absolutely necessary; and on every occasion much preferable to the reverse. In the exhibition of mercurials, great care must be taken, that no irritation be excited in the alimentary canal, and consequently the doses must be diminished, and given at greater intervals, whenever symptoms of gripes or diarrhœa occur; and it is particularly advised, that the medicine be suspended on the slightest appearance of salivation.

2. Children affected with rickets from scrophula, generally have the head considerably enlarged, chiefly from the increased size of the parietal bones. Their trunk is much bent forwards, and their back arched; the epiphyses of the long bones are greatly swelled;

swelled; the clavicles extremely convex anteriorly, forming a regular hollow, posteriorly. The humerus is generally bent inwards, and the bones of the fore-arm still more so; the hands are large. The body of the thigh-bone is bent forwards, the condyles are nearly on a level, the tibia and the fibula, are frequently concave towards the outside of the leg, the knees in walking press on each other, the feet are turned outwards; and when the child walks or stands, it rests upon their side. The breast is small and tight, the ribs are large, and seem as if bound together at their extremities next the sternum. The pelvis is smaller, the ilia being narrow, and the pubis flattened. The bones of the pelvis are relaxed, which renders the gait unsteady, and sometimes even prevents walking. Various deviations in the form of the spine, arise from changes produced upon the cartilages and ligaments which connect the vertebræ together.

In many cases of this species of rickets, swellings, of the lymphatic glands are perceived, but our author does not consider the appearance of these swellings as forming

a sure indication of the nature of the disease ; for he has not only seen many instances of rickets from scrophula, unaccompanied with such symptoms, but he has also frequently observed them in that species, occasioned by the syphilitic virus. He admits, however, that it is extremely difficult to draw the line of distinction.

Mercurial preparations, joined with antiscorbutics, together with a drain from issues or setons, but particularly from burning with moxa, and the occasional use of mineral waters of a sulphureous nature, such as those of Bareges, are the means to be employed in the cure of this species of rickets.

3. The third species of the disease, that arising from scurvy, is not nearly so frequent as the two former. The cases where rickets are the consequences of this cause alone, are sufficiently strongly marked, but it sometimes happens, that, along with swelled gums, and that particular appearance of the skin peculiar to scurvy, the inguinal and axillary glands, and also those of the neck, are enlarged; and hence there is the appearance

pearance of a combination of scurvy and scrophula.

Antiscorbutics are the chief remedies recommended for simple cases; and where there seems to be a complication of scrophula, a course of mercury is advised, after the use of the antiscorbutics. M. Portal is of opinion, that in rickets arising solely from scurvy, mercurial preparations are injurious.

4. The fourth species of symptomatic rickets, according to our author's division, is that succeeding to cutaneous eruptions. This species supervenes to the measles, the small-pox, the itch, and even after the sudden disappearance of the red gum, or where that eruption has not been sufficiently copious, or has not continued for a sufficient length of time. M. Portal imagines, that the disease may also arise from the repulsion of any cutaneous eruption.

With respect to the treatment, he advises that a blister be immediately applied, as nearly as possible to the seat of the eruption, and that a drain from an issue be established. Infusions of the flowers of borage, or elder, or a decoction of sarsaparilla, should be frequently drank; if the
symptoms

symptoms do not render such drinks improper, antimonial preparations are of the greatest use. Asses milk, if there be no obstruction in the abdominal viscera, should be prescribed. Bathing in milk-warm water proves beneficial. M. Portal mentions, that he has tried in this, and some other species of rickets, preparations of sal ammoniac, without success. In two cases where the disease succeeded to the itch, he caused the children to be re-infected, but without any benefit.

5. Rickets preceded by obstructions in the abdominal viscera are, according to our author, a very common occurrence. The liver is the principal seat of the obstruction. In these cases it is enlarged, but its texture generally continues natural, though sometimes it is less firm. By its increase in size, it raises the diaphragm, compresses the right lobes of the lungs, rendering it more compact than natural, and injuring its texture, so that it becomes fleshy or steatomatous. Difficulty of breathing, and watery effusions into the thorax, are the consequences. The enlargement of the liver commences

commences at some period, between birth and the eighteenth month, or second year. The spleen is considerably enlarged, it is seldom hardened or shrunk; but this sometimes happens, and when that is the case, the mesenteric vessels connected with the vena porta, are extremely distended with blood. The affections of the spleen, and of the mesentery, however, our author supposes are secondary to that of the liver, because in some cases the liver alone is diseased.

While these abdominal obstructions are forming, and sometimes after they have actually formed, symptoms of rickets, with hectic fever and emaciation, take place, and the child is gradually destroyed. M. Portal supposes, that the same circumstances which produce this species of rickets, frequently destroy children during the process of teething. He imagines, that obstructions in the abdominal viscera are occasioned chiefly by bad diet, both of the nurse and of the child.

The treatment consists in the regulation of the diet, the exhibition of antiscorbutics both to the nurse and to the child, and in
some

some cases, a combination of mercurials with these, was found necessary. Where the process of dentition is accompanied with much pain, the application of leeches to the gums, the establishment of an issue in the arm, or keeping up a drain from behind the ears, together with warm bathing, are chiefly recommended.

6. Rickets arising from gout or rheumatism, attack adults only. This species of the disease is not so common, he thinks, as has been supposed. In cases of this kind, sometimes the bones are softened, and sometimes they are enlarged, and rendered deformed by an addition of ossific matter.

In the treatment of such cases, our principal dependance is to be placed, we are told, upon blisters or issues, formed either by setons, or by caustic, or, what M. Portal considers preferable, by means of moxa, the use of soap-pills, of a decoction of sarsaparilla, of the juice of endive, together with a milk diet, warm-bathing, and in some cases the application of leeches to the anus.

Besides the above species of rickets, M. Portal mentions two others. The one of these

these is, that which arises from castration at an early period of life, or by the shocking practice of masturbation. It is unnecessary to observe, that when the disease is produced by the former of these causes, it is incurable. The latter cause is with difficulty, he says, overcome, as the unfortunate victims of the practice alluded to, are so infatuatedly addicted to it, that no reasoning can, in general, prevail upon them to relinquish it. Where, however, that can be accomplished, cold-bathing, the use of the peruvian bark, nourishing diet, change of air, and frictions of the spine and extremities, contribute greatly to restore health. The other species is common both to children and adults. It arises from the irregular contraction of the muscles; and this is occasioned, either by a spasm or a paralysis taking place in some of the muscles. The spine is the part affected in such cases.

For the cure of this disease, warm bathing, and such species of exercise as are calculated to strengthen the weakened muscles, together with friction, and in some cases the use of blisters or setons, are recommended.

